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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,992	02/12/2004	Georg Braun	INF 2166-US	3317

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EXAMINER	
SCHLIE, PAUL W	

ART UNIT	PAPER NUMBER
2186	

DATE MAILED: 03/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/777,992	BRAUN ET AL.	
	Examiner	Art Unit	
	Paul W. Schlie	2186	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 September 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 2.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-20 have been examined.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the self-allocation of logical address space by memory modules in a serialized topology, does not enable the information necessary for coherent DRAM access control, such as bank configuration or row/column organization of each of the said modules, to be communicated back to the controller (as indirectly acknowledged as being necessary for their access per the control signals depicted within figure 2, and within the body of the disclosure). Thereby the specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to reliably access self-configured memory modules as disclosed commensurate in scope with these claims. Corrective action is required, however the applicant is reminded that no new matter may be added which is not supported by the original disclosure.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over David (6,931,505) in further in view of Sathaye et al. (5,517,617).

As per independent claims 1, 11, 15 and 17, David teaches a system and/or method comprising a plurality of memory modules which may be configured in a cascaded point-to-point topology, each comprising an control/interface buffer component which may be given a command from a memory controller which will be processed by the said buffer if intended for itself, or alternatively passed to the next sequentially so configured module or ultimately the originating said memory controller (see abstract, figures 2-5, and column 6 lines 32-40), but does not teach that such a command may comprise an initialize command to instruct said memory module to initialize and identify the address range that it will assume responsibility for, and then forward that information along with a corresponding request to the next such memory module or ultimately back to the originating memory controller; however Sathaye et al. teaches a controller which may be comprised within a similar point-to-point network topology which may derive it's address as a function of it's neighbors so initialized address (see abstract lines 9-14). Thereby it is considered obvious to one of ordinary skill in the art to combine that taught by David with that taught by Sathaye et al. to enable such a memory module to receive a initialize command along with an initialization address indication from a memory controller, which said module may then utilize to determine it's address range, and then in-turn forward an initialize command to it's neighbor including an indication of it's initialized address range and so on, thereby

ultimately forwarding back to the originating memory controller an initialized address indication as a function of all such modules within the cascaded point-to-point topology, for the benefit of enabling such modules to self configure their address ranges upon request from a controller and forward an indication of the selection back to the controller.

As per claims 2-10, 12-14, 16 and 18-20, being dependent on claim 1, 11, 15, 17, or correspondingly dependent claim, as taught and detailed above, each memory arrangement which may contain a buffer (see David figure 2 element 222) may receive an indication of available address ranges from a controller at power-up-reset or upon its receipt (see Sathaye et al. figure 6), which may then be utilized to determine its address range and then be forwarded indicating the remaining available address range to either a successive memory arrangement or the originating controller thereby providing indirectly indication of utilized address ranges, where each bit may correspond to a memory arrangement is considered inherent, as each bit within a collection of bits is inherently considered to correspond to an independent logical entity thereby may inherently logically correspond to any uniquely addressable entity (claims 2-10); as claims 12-14, 16 and 18-20 are considered to correspond to claims 2-10 in other format, they are corresponding rejected based on the same argument above.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul W. Schlie whose telephone number is 571-272-

6765, or whose email address is [paul.schlie@uspto.gov]. The examiner can normally be reached on Mon-Thu 8:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Kim can be reached on 517-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PIERRE BATAILLE
PRIMARY EXAMINER
3/15/06